

Frequently Asked Questions for Chapter 5 Residential amendments & Article XIV Green Building Regulations.

I am adding an addition on my house. What specific insulation requirements will I have to meet?

The amendment to the International Energy Conservation Code (IECC) will require increased R-values for insulation. The followings R-values will be required; R-49 in ceilings, R-20 in walls and R-19 in floors that are located over unconditioned space. Note that some of these increased R-values may require larger framing material to accommodate the additional insulation.

I am replacing the old windows in my house. Do I need a permit for this work?

No permit is required for the window replacement so long as no structural changes are being made to the existing openings. Although no permit is required, the new windows must still meet the new higher performance requirements. The fenestration U-factor must be 0.35 or better with a solar heat gain coefficient (SHGC) rating of 0.45 or better. You can contact the window manufacture for the window ratings.

My heating and cooling unit needs replacing. What should I know before purchasing new heating or cooling equipment?

All new installed heating and cooling equipment shall be U.S. EPA Energy Star certified. A licensed mechanical contractor is required to obtain a permit and perform all installations and replacement of fuel fired heating equipment.

My existing heating/ cooling unit is not U.S. EPA Energy Star rated. Can I add ductwork to the system to accommodate additional space that is being added?

Yes; however, any new ductwork that is added to the existing system shall be sized, sealed, insulated, and installed to meet all current code requirements.

I am installing some new or additional lighting. Are there any specific requirements on lighting efficiency?

Yes, a minimum of fifty percent (50%) of the lamps in permanently installed lighting fixtures shall be high efficacy lamps. This applies to lighting equipment that serves the interior and exterior of buildings including accessory structures and garages. High efficacy lamps over 40 watts shall have a minimum lamp efficiency of 60 lumens per watt (LPW).

I am adding a new wood-burning fireplace to my home. Are there any specific requirements I should know?

Yes, all new wood-burning fireplaces shall have gasketed doors installed and outside combustion air provided.

I am updating my bathroom and will be replacing the plumbing fixtures. Does this require a permit and are the new plumbing fixtures required to meet the new reduced flow rates?

No, a permit is not required to replace a water closet (toilet), faucet or showerhead so long as the fixture location is not being changed. However, all new plumbing fixtures will be required to meet the code requirements for reduced flow rates. The maximum flow rates for the fixtures is; lavatory faucet 1.5 gallons per minute (gpm), shower heads 2.0 gpm, sink faucet 1.5 gpm and water closets 1.28 gallons per flushing cycle.

I am putting an addition on my house. Do I need to comply with Article XIV, the Green Building requirements?

No, so long as your addition does not exceed a certain size. Article XIV applies to all new home construction and additions/alterations to one- and two-family dwellings that meet the criteria for “new construction” as defined in Article VI. This would include additions that increase the gross square floor area by more than 110% of the existing gross floor area, but not to exceed 1,500 gross square feet added. Should your addition exceed one of the two limitations, you would then need to meet the requirements of Article XIV.

Do I need to install a sprinkler system in my new addition or renovated space?

The installation of sprinkler systems is only required for new homes and additions where the added gross square floor area exceeds 110% of the existing gross floor area or the total area added exceeds 1,500 gross square feet. A sprinkler system would also be required, regardless of the total square footage added, if a house with an existing sprinkler system is expanded.

I would like to install solar panels on my roof. What do I need?

A residential building permit and an electrical permit would be required. The roof structure must be capable of supporting the additional weight of the panels. You may need to consult a licensed architect or structural engineer for additional information. Plans submitted for permit should show the proposed location of the solar panels to be added. A licensed electrician would be required to install all of the necessary wiring associated with the solar panel installation.